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APR 7 1987
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ASSESSING THE NEED

Considering all the other skills that your students are required to know, how do you make the decision to spend time on typing skills versus academic and other skills that are written into your student's IEP? You probably should think about this, and before deciding to have a student work on keyboarding skills, determine whether word processing will enhance the student's writing ability and if it is a worthwhile tool for your student to learn.

A lot depends on your student's response to the computer and word processing. There are a few ways to assess this:

1) You can keyboard at the computer while the student dictates a story. The student who is impressed with the keyboarding may make a comment similar to that expressed by a student of Bev Bohn's (she's a teacher in Missouri). The student said, "With your typing, Mrs. Bohn, why are you a teacher? You could get a real job." (You can be sure that her student saw typing and word processing as a valuable tool.)

2) A peer, one from a more advanced class, or a parent who has keyboarding skills could take

Continued on page 2

EVALUATION CRITERIA FOR KEYBOARDING SOFTWARE

1. Does it simulate actual typing? ______ ______
2. Encourage touch typing? ______ ______
3. Lead the student through a progression of skills from easy to hard? ______ ______
4. Present whole words and sentences as well as single letters? ______ ______
5. Motivate the student? ______ ______
6. Maintain student records? ______ ______
7. Provide user control of speed, letters, words, etc.? ______ ______

Computers and Special Ed

GOVERNMENT DOCUMENTS
COLLECTION

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A newsletter for Massachusetts special educators published by the Bureau of Program Development and Evaluation, Division of Special Education, Massachusetts Department of Education. November/December 1986.

Keyboarding... What to do

by Joan Thormann

You may have heard that word processing enhances fine motor skills, alleviates anxiety about writing, and eases editing, revising and proofreading for special needs students. All of this makes sense, but an issue that confronts all would-be word processing enthusiasts is keyboarding.

The student who cannot find the right key or uses the tedious hunt-and-peck method can easily become frustrated. Word processing turns into another demon rather than a solution.

Students do not need sophisticated keyboarding skills when using most Computer Assisted Instruction, simulation or problem-solving software. However, lack of keyboarding skills can be a real barrier to successful use of word processing.

There are a number of ways you can combat this problem. At the secondary level you might enlist the help of the business teacher or typing teacher and arrange a program to teach typing skills to your special needs students. Textbooks to teach typing are available and one such as "Type It" from Educators Publishing Service, Inc. is specifically designed for use by special needs students.

Probably the best and most straightforward solution is to select one of many software programs developed to teach students to type.

The third solution is, naturally, more difficult than a touch of the finger. It involves software. As with all software it is necessary to preview keyboarding software to see if it will meet your students' needs and attain the goals you want them to reach.

In the accompanying box are suggestions for evaluation you might use when selecting software to teach keyboarding skills. You should, of course, remember that no software will meet all of your criteria. Just choose the program that fits best.

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An Apple Club for your students

You can uncover new ideas and help students learn about personal computers by joining teachers and students in more than 10,000 Apple Computer Clubs around the world.

Apple Computer Clubs International (ACCI), funded by Apple, Inc., provides teachers with challenging and fun ideas for using computers with students.

You do not have to be a computer expert to join ACCI, nor do you need a ton of equipment. All you need is an interest in working with students as they learn about personal computers.

Membership includes:

1) A 167-page, fully illustrated handbook that contains directions for starting and running a successful club and ready-made lesson plans for computer use;

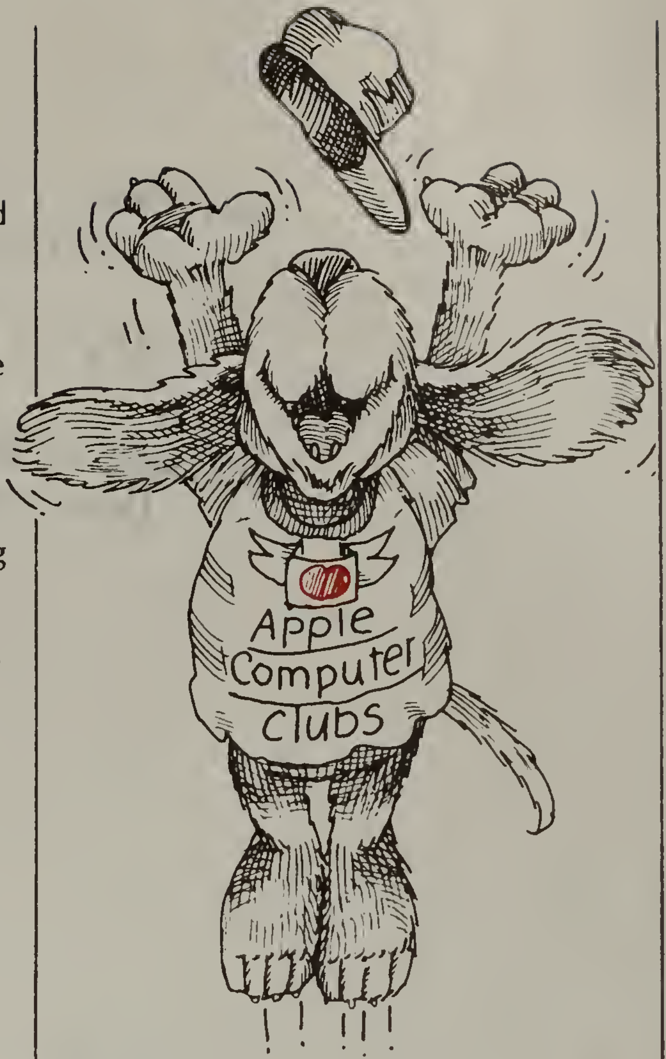
2) A 100 page-book that outlines the Challenge Awards Program, a scholastic merit award program containing hundreds of practical computer activities;

3) A one-year subscription to "Computer Club News," a teacher-oriented newsletter which brings you information on special events, new resources, student activities, and computer contests and competitions;

4) Thirty student membership cards.

More is available. Your club can win prizes through mini-competitions announced in the newsletter. Club members can purchase merchandise including T-shirts, buttons and hats. An Advisor's Incentive Plan has been set up to reward advisors for keeping the club active and promoting the start of new clubs. Advisors are eligible for incentives that include club merchandise, equipment and a free trip to Hawaii.

The Apple Challenge Award Program consists of a flexibly structured merit award system similar to scouting programs. Students who satisfy sets of practical activities earn red or gold Apple pins.



Although the Computer Club and Challenge handbooks were written for use with non-handicapped students, many special education teachers use the club program with their students and modify activities to meet students' needs and abilities.

You can organize a club for special education students during regular class time, after school, or during an activities period. If you have club meetings after school or during an activities period you can invite non-handicapped students to join and thus provide a positive, relaxed setting where special education and non-handicapped students can interact. You do not have to run a club by yourself, either; you can join forces with another teacher, a parent, or your school's computer coordinator. If a club has already been established in your school you may want to help the club leader modify activities and integrate your students in the club program.

For more information write Apple Computer Clubs International, 175 Middlesex Turnpike, Bedford, MA 01730-9990 or call (617) 271-0330. ■

Keyboarding: What to do

continued from page 1

dictation or enter handwritten papers. Your student could edit on the computer once basic word processing is learned, or edit hard copy and have the keyboarder make revisions.

3) You can ask the student directly if she or he would like to learn how to use the word processor after seeing a demonstration. The typical student will appreciate the neatness of the typewritten page and be in awe of the ease of revisions and spelling checkers.

SCHEDULING USE

Naturally, scheduling use of the computer and keyboarding time often presents a problem. Ten to fifteen minutes per session is about the right time to allot to each student, preferably each day or if computer access is limited have them use the software at least twice a week. If a lab is available the process will go much faster. But if you have only one or two computer(s) available all is not lost—have students take turns.

There are a number of keyboarding software packages on the market. Some of them are:

Type to Learn (Sunburst);
Junior Typer (Aquarius Publishing Co.);
Computergarten, Alphabetic Keyboarding, Kids on Keys (Scholastic);
Computer Keyboarding (South-Western);
MasterType (Scarborough);
Typing Tutor (Microsoft);
Typing for New Typists (TNT) (Grolier Electronic Publishing);
Keyboard Cadet (Mindscape).

More reading:

Wetzel, K. "Keyboarding skills: Elementary, My dear teacher"The *Computing Teacher* pp. 15-19, June 1985.
Jackson T. & Berg, D. "Elementary keyboarding — Is it important?" *The Computing Teacher,* pp.8-11, March, 1986. ■

Dept. of Ed shows ideas at Computer Faire

Sharon Goldsmith and Joan Thormann took care of details for the booth.

Tony Caetano of the Department of Ed talks to visitors at Booth 351.

"Gee, I've stumbled on a gold mine!"

That was the comment of one of the several hundred people who visited the Massachusetts Department of Education booth at the ninth Northeast Computer Faire held Oct. 30 through Nov. 1 in Boston.

Staff members from the Division of Special Education and Division of Curriculum and Instruction greeted visitors to Booth 351, which provided a glimpse of what the Department is doing to encourage use of computers in schools.

The exhibit was made available at no cost to the Department through the generosity of Sheldon G. Adelson, president of The Interface Group, Inc., which staged the Computer Faire.

A spokesman for Adelman said he contributed the booth and equipment because he wants to encourage a closer relationship between educators and computer users. "Computers are going to be increasingly important in the schools of tomorrow. Cooperation and exchange of information are vital," the spokesman said.

The Interface Group is the world's leading producer of computer and communications conferences, and holds shows on four continents.

An estimated 500 people stopped by the booth to ask questions or pick up literature. A Department of Ed microcomputer was available for trying out samples of educational software.

Visitors were asked for their comments. Typical was:

From a high school teacher: "This is a good idea. I'm glad the Department is doing this."

From an Air Force engineer: "I didn't know the state was doing anything."

From a nurse who works with special needs students: "This is great!"

The visitors included parents, college students, and people in the computer industry. Many asked for information about software, and about resources such as reading lists on technology.

Those who were teachers or principals were interested in information about Department projects such as SPIN (the School and Pupil Information Network); SpecialNet, a telecommunication system for special education; and Chapter 188 technology grants.

Educators presented three workshops during the Faire. Subjects were software tools for teaching children K-8; software tools for young adults; and developing computer training programs for teachers.

"I believe we were able to help a lot of people who badly needed information," said Dr. Joan Thormann, computer technology consultant in the Department who was responsible for activities at the booth.

Dr. Sharon C. Goldsmith, who heads the Department's Bureau of Program Evaluation and Development and who made arrangements with Intrerface Group for the booth, said she considered the experiment a success and hopes to duplicate it in future years. ■

MVCRC: Help for voc ed students

Need to review software programs that are suitable for vocational use in special education? Need to preview a software program? Turn to the Massachusetts Vocational Curriculum Resource Center, in Lexington.

MVCRC, located at Minuteman Regional Vocational Technical High School, was established in 1980 to provide curriculum resources to vocational educators in Massachusetts. It is funded by the Massachusetts Department of Education.

Its primary job is to give vocational educators access to national, state, local and commercially developed materials through a lending library, and to provide professional development and inservice training.

The Center also previews software and conducts computerized searches of databases; operates a free-loan reference library; offers inservice training in curriculum design, development and modification; and publishes a quarterly newsletter and a book catalog.

Over 200 programs are available for the Apple II series microcomputer. Most of these titles may be checked out on loan. The software is for review and evaluation, enabling teachers to try out a program before purchasing it. Two on-site computers are available for teachers' use.

Inservice training workshops are offered on request at local school districts. Most are held at secondary vocational or comprehensive high schools, but any school in Massachusetts that prepares secondary students for the world of work could also be an appropriate site for a workshop.

Examples of subjects for the school-based workshops are "Modifying Curriculum for Special Needs Students" and "How Teacher Expectations Affect Student Performance." Special sessions also are offered on a statewide or regional basis.

MVCRC has another function: It is the Massachusetts link to the National Center for Research in Vocational Education. Located at Ohio State University, the National Center is involved in research, program development, dissemination of products, and program evaluation.

MVCRC maintains a large collection of research documents from the National Center, and has worked with the National Center staff on dissemination of selected exemplary products.

MVCRC also is a link to another nationwide curriculum group, the National Network for Curriculum Coordination in Vocational and Technical Education. This agency was established in 1972 by the U.S. Department of Education, to provide a system through which vocational curriculum could be shared and duplication of effort reduced.

The National Network works through six regional curriculum centers. These include the Northeast Curriculum Coordination Center, in New Jersey, which serves New England, New York, New Jersey, Puerto Rico and the Virgin Islands.

Major benefits of participating in the National Network and the Northeast Curriculum Coordination Center are the ability to locate curriculum materials from across the country, and the technical assistance that is available from both organizations.

If MVCRC doesn't have the material to answer a request, the librarian uses a computerized search to locate other sources of information by means of an electronic mail network. It can communicate with curriculum developers nationwide through the use of ADVOCNET, an electronic mail network which provides a link to other states, the U.S. Department of Education, and NCRVE.

For more information about these services, call (800) 362-4371 or write MVCRC, Minuteman Tech, 758 Marrett Rd., Lexington, MA 02173. ■

Computer Museum tailors tours for students

The Computer Museum will help special education teachers arrange a tour of the museum that meets the specific needs of their students.

The museum is the only one in the world devoted to the past, present and future of computers and their uses. It's located on Museum Wharf, in downtown Boston.

Teachers and students can experiment with more than 25 hands-on exhibits that range from SAGE, the largest computer ever built, to modern desktop computers.

In more than a half-acre of exhibits, visitors can "paint" a picture, create a melody, fly a plane on a flight-simulating computer, program a computer to say a name, or journey through computer history.

Groups of visitors can be met by a guide who will lead a tour that includes the computer center, a ride in a glass elevator, and a half-hour tour of early large computer systems. The tour can be geared to the interest level of the group. After the tour, the group can explore hands-on exhibits.

Most groups plan to spend one to two hours at the museum. Teachers are encouraged to visit the museum before bringing a group; free admission is provided for these visits.

Reservations for educational group tours must be made at least two weeks in advance by calling (617) 426-2800, weekdays between 8:30 a.m. and 4:30 p.m. Admission for groups of 10 or more is $2 per student or $3 per adult, and chaperones are admitted free; full payment by cash or check is required the day of the visit.

A limited number of parking-by-permit spaces are available in front of the Museum for cars and vans carrying handicapped visitors. If spaces are not available, visitors may be dropped off in front of an elevator before the driver parks in a lot nearby. Lunch is available but group reservations must be made by calling (617) 482-1746.

The museum is funded in part by the Massachusetts Council on Arts and Humanities. ■

HAVE YOU SENT US THIS FORM?

If you are you interested in receiving a copy of this newsletter on a regular basis, and have not already returned this form, please fill it out and mail the form to Joan Thormann, Division of Special Education, 1385 Hancock St. Quincy, Mass. 02169.

Name Position or Title

School Address

City, State, Zip Telephone

Type of classroom or program

Total number students you serve

Number of students using computers

Brand(s) of computer(s)

Where is (are) the computer(s) located?

What software programs do your students use most frequently?

What is your evaluation of this issue of the newsletter?

Yes	No		Yes	No	
___	___	Useful	___	___	Looks good
___	___	Interesting	___	___	I like the name
___	___	Too elementary	___	___	Longer articles
___	___	Over my head	___	___	Shorter articles

Would you be willing to contribute information and/or articles for future issues of this newsletter? ___ yes ___ no

Project REACH uses computers to strengthen student skills

Counselor Cheryl Koki teaches her students to use a computer to help compensate for their handicapping conditions in a learning environment. She also is training her students in word processing.

Cheryl works with Project REACH (Realizing Educational and Career Hopes), which is funded by the U.S. Department of Education to enhance educational opportunities for individuals with disabilities.

The project helps qualified special needs students in the Boston area age 16 and older to understand how to enter and complete post-secondary education.

An array of services is available to these students. They can explore career possibilities, educational planning, selecting post-secondary schools and colleges, acquiring financial assistance for post-secondary education, and learning techniques to compensate for a handicapping condition in the classroom.

Cheryl, one of four counselors in Project REACH, has found that by learning word processing, students become more independent and need less support in writing papers and organizing class notes.

This fall, in addition to word processing training she is giving her students an opportunity to use computer-assisted instruction to strengthen their math and reading skills. She selects software that is appropriate to the students' age and interests.

Workshops for parents and students in other areas are also part of the program. For example, Michael Bienenstock gave a workshop on "Post-secondary Education of the Hearing Impaired" on Nov. 8, and in January the Project REACH staff will hold a "Financial Aid Workshop Night."

Coming events include a one-day workshop on learning disabilities that will be scheduled during March.

To receive a Project REACH newsletter and more information write or call Bill Pollard, Director, Project REACH, UMass/Boston, Downtown Campus, Boston MA 02116 or call 956-1141 (Voice) or 956-1196 (TDD). ■

MASSACHUSETTS DEPARTMENT OF EDUCATION
1385 Hancock St., Quincy, MA 02169
Telephone (617) 770-7500

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